

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. C  
& INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV. 1

REF. TCCA STC SH12-3  
REF. FAA STC SR03091NY  
REF. EASA STC 10039042

**SUPERCEDED BY**

Rev. B 9/13/4/16

## 1.0 PURPOSE

FOR D206-817-011 KITS AT CHG 001, THE DSI 9643-011 RETAINER KIT IS AVAILABLE TO FACILITATE INSTALLATION OF THE RETAINERS. THE KIT INCLUDES PARTS TO REPLACE THE RIGID D4545-043/-044/-047/-048 RETAINER ASSEMBLIES WITH SEPARATE BRACKETS AND RETAINERS THAT ARE ASSEMBLED BY THE INSTALLER AND ALLOW FOR EASIER ADJUSTMENT. THE KIT ALSO INCLUDES NEW D4543-3/-4 OUTER RETAINERS THAT MORE ACCURATELY FIT THE PROFILE OF MOST AIRCRAFT, AS WELL AS SOME ADDITIONAL MS21061L08 SINGLE WING NUTPLATES TO ASSIST WITH THE INSTALLATION OF THE D4544-1 CENTER RETAINER.

## 2.0 PARTS LIST

QTY -011	PART NUMBER	DESCRIPTION
X	DSI 9643-011	RETAINER KIT
1	D4541-3	BRACKET
1	D4541-4	BRACKET
1	D4541-7	BRACKET
1	D4541-8	BRACKET
2	D4542-3	RETAINER, INNER
2	D4542-7	RETAINER, INNER
1	D4543-3	RETAINER, OUTER
1	D4543-4	RETAINER, OUTER
88	MS20426AD3-4	RIVET
44	MS21059L3K	NUTPLATE
10	MS21061L08	NUTPLATE

WHEN INSTALLING A D206-817-011 KIT AT CHG 001 ALONG WITH THE DSI 9643-011 KIT, REPLACE THE FOLLOWING PARTS IN THE D206-817-011 CHG 001 KIT AS FOLLOWS:





REPLACE D206-817-011 CHG 001 PART NUMBER	WITH DSI 9643-011 PART NUMBER
(1x) D4545-043	(1x) D4541-3 (1x) D4542-3
(1x) D4545-044	(1x) D4541-4 (1x) D4542-3
(1x) D4545-047	(1x) D4541-7 (1x) D4542-7
(1x) D4545-048	(1x) D4541-8 (1x) D4542-7
(1x) D4543-3	(1x) D4543-3 (NEW SHAPE)
(1x) D4543-4	(1x) D4543-4 (NEW SHAPE)

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: 13.02.06  
CERT. NO.: SH12-3  
ISSUE NO.: 1

A	NEW ISSUE	CP	13.02.06
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED	ASS	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9643	SHEET 1 OF 5
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DE APPR.		RETAINER KIT	NTS
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### 3.0 INSTALLATION

IF INSTALLING A D206-817-011 KIT AT CHG 001 WITH THE DSI 9643-011 RETAINER KIT, STEPS 3.3 AND 3.4 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV. C ARE MODIFIED AS FOLLOWS:

- 3.3 Install Dart inner retainers. It is acceptable to hand form retainers as required to allow fit. Retainers should be located so that they are approximately flush with the aircraft skin. Locate retainers and transfer drill  $\varnothing 0.128$ " from aircraft frame. Locate as follows, using Figure 3-2 as reference:
- a) Locate D4545-041/-042 Lower Inner Retainers flush against the door pillars. The retainer should be oriented with the MS21061L3K nutplate (the non-symmetric nutplate, ref) near the door post. See Figure 3-3 for reference.
  - b) Locate D4541-3/-4 Brackets on the door pillars, above the -041/-042 retainers. See Figure 3-3.
  - c) Locate D4541-5/-6 Brackets above the -3/-4 brackets. See Figure 3-4.
  - d) Locate D4541-7/-8 Brackets along the top edge, with one side aligned with the center column. See Figure 3-4.
  - e) Relocate the 206-031-112-039 (or equiv.) clip removed at step 3.2(g) per Figure 3-3.

Install retainers/brackets wet with Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 sealant between retainers and a/c frame. Fasten D4545-041/-042 Lower Inner Retainers with CR3214-4 (or NAS9301B or M7885/2) rivets and NAS1149DN432J (or 140-001-1 or AN960JD4 or equiv.) washers. Fasten D4541-X Brackets with MS20600AD4 rivets. Reinstall retain clip (206-031-112-039 or equiv.) with CR3213-4 rivets. See Figure 3-3 for reference. Note that it is acceptable to trim the ends of the retainers to allow fit. It is acceptable to use oversized rivets as required.

- 3.4 Locate D4542-X Retainers onto the D4541-X Brackets as follows, see Figures 3-3 & 3-4 for reference:

- a) Locate D4542-3 Retainers onto the D4541-3/-4 Brackets
- b) Locate D4542-5 Retainers onto the D4541-5/-6 Brackets
- c) Locate D4542-7 Retainers onto the D4541-7/-8 Brackets

Hand form D4541-X Brackets as required to fit profile of windshield. Locate and transfer drill rivet holes to D4542-X Retainers and open to  $\varnothing 0.098$ . Locate and transfer drill screw holes and open to  $\varnothing 0.250$ ". Dimple the  $\varnothing 0.098$  holes  $\varnothing 0.180 \times 100^\circ$  and install MS21059L3K nutplates with MS20426AD3-4 rivets.

FIGURES 3-2, 3-3, & 3-4 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV. C ARE MODIFIED AS SHOWN ON SHEETS 3 TO 5 OF THIS SERVICE INSTRUCTION.

THE DSI 9643-011 KIT INCLUDES ADDITIONAL MS21061L08 NUTPLATES THAT MAY BE USED WHEN INSTALLING THE D4544-1 CENTER RETAINER (REF. SECTION 3.7 OF IIN-D206-817 REV. C).

### 4.0 WEIGHT AND BALANCE

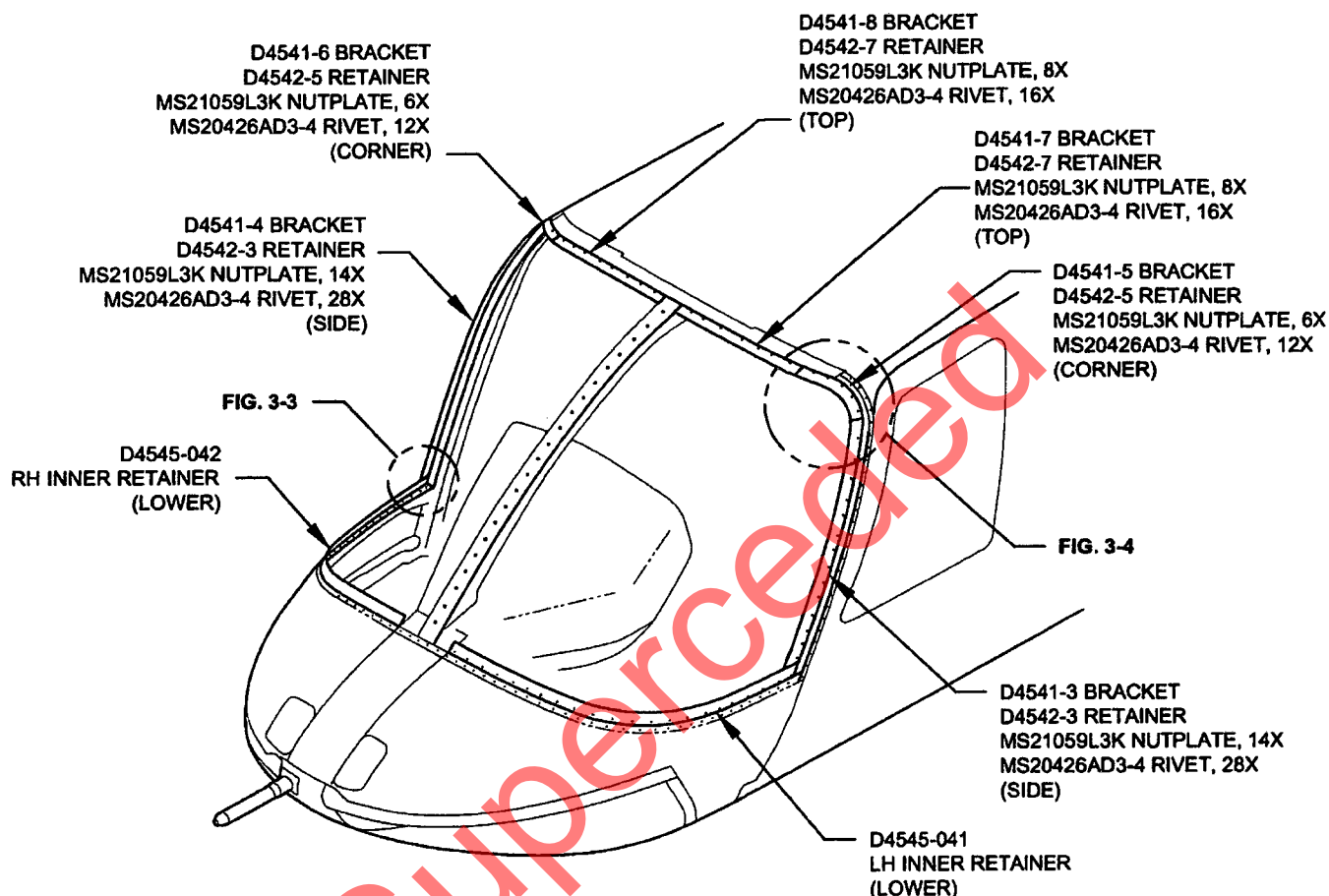
THERE IS NO CHANGE TO THE WEIGHT AND BALANCE OF D206-817-011 KITS WHEN MODIFIED WITH THE DSI 9643-011 ALTERNATE RETAINER KIT. REFER TO SECTION 4.0 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV. C FOR THE WEIGHT AND BALANCE.

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ISSUE NO.:	1

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**FIGURE 3-2**

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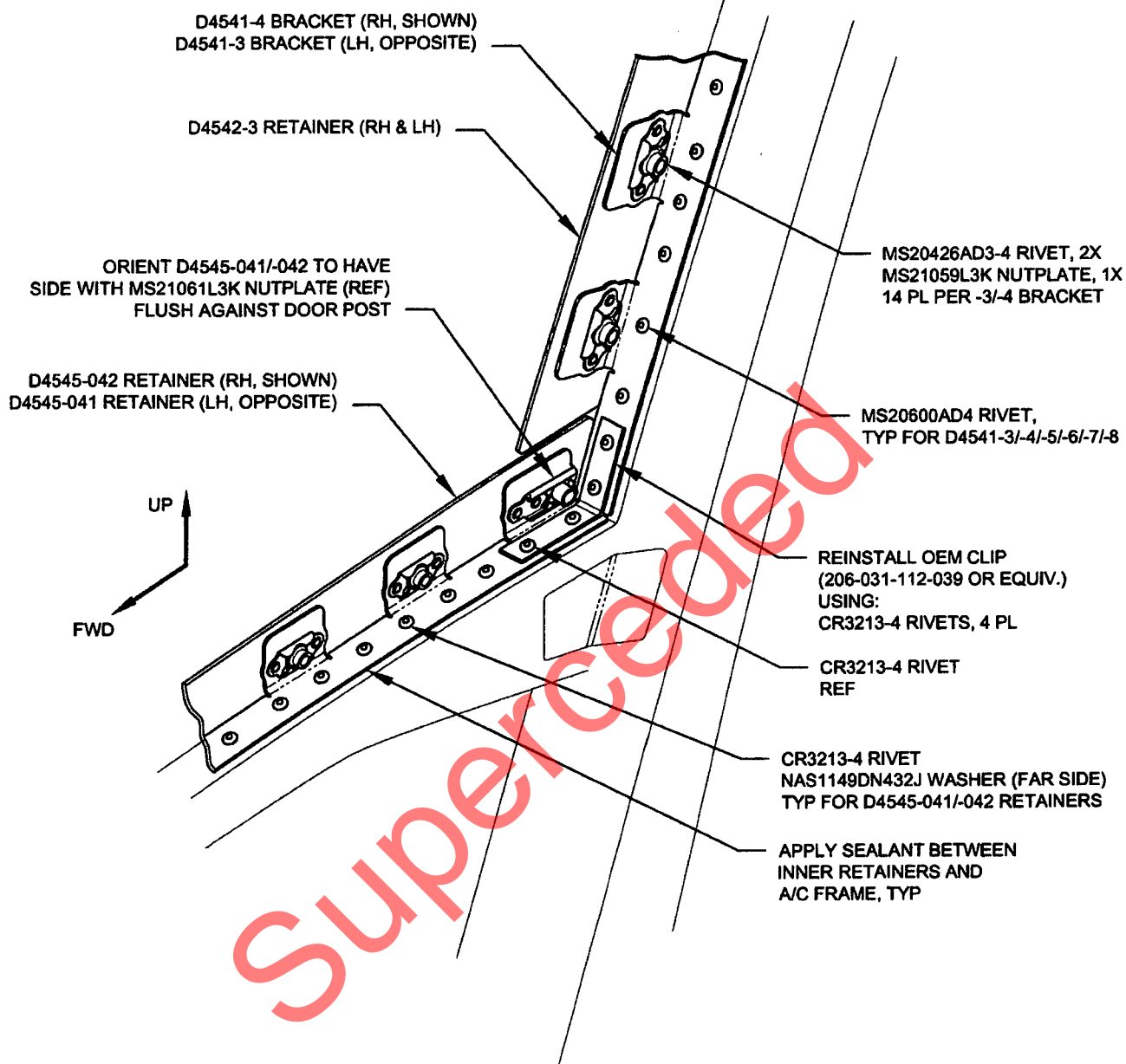
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**FIGURE 3-3**

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D4541-7 BRACKET (LH, SHOWN)  
D4541-8 BRACKET (RH, OPPOSITE)

MS20600AD4 RIVET  
TYP

D4541-5 BRACKET (LH, SHOWN)  
D4541-6 BRACKET (RH, OPPOSITE)

D4541-3 BRACKET (LH, SHOWN)  
D4541-4 BRACKET (RH, OPPOSITE)  
REF, SEE FIG 3-3

D4542-7 RETAINER (LH & RH)  
1 PL PER SIDE

NOTE ORIENTATION  
OF NOTCHES

D4542-5 RETAINER (LH & RH)  
1 PL PER SIDE

MS20426AD3-4 RIVET, 2X  
MS21059L3K NUTPLATE, 1X  
TYP ALL BRACKET TABS

D4542-3 RETAINER (LH & RH)  
REF, SEE FIG. 3-3

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
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**FIGURE 3-4**

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